ory, according to some observers, for recent events in particular, is in most cases impaired; aphasia, in the strict sense of the term, is of doubtful occurrence. The almost constant existence of emotional disturbances is noted. Occasionally these patients have what they call "nervousness," consisting of morbid fears and impulsive tendencies. True insanity in the later stages of myxædema has been observed several times; when it occurs, it is usually with hallucinations of hearing and sight.

The principal symptoms of the disease are summed up by the author under the following heads: 1. Slowness of bodily movements. 2. Slowness of intellectual operations. 3. Constantly subnormal temperature. 4. Diminished excretion of urea. 5. Solid ædema of the skin and connective tissue. 6. Diminished size of thyroid The author believes: 1. That in the early stages myxædema is essentially a disease of imperfect nutrition, dependent probably on generalized angio-spasm. 2. That the solid œdematous condition of the skin and connective tissue is due to a form of lymphatic obstruction which may also be ascribed to vasomotor influences, and that the accumulated products undergo changes which result in the formation of mucin. 3. That the condition of the thyroid gland is also to be explained on the vasomotor hypothesis. 4. That the more severe mental symptoms, such as insanity, occurring in the later stages of myxœdema, are due to alterations in the brain itself. 5. That although myxœdema is a distinct morbid entity, it is probably intimately allied to certain other disorders, such as sporadic cretinism and scleroderma. 6. That the solid cedema, which is universal in myxcedema, may be localized to various parts of the body, such as the tongue and extremities. 7. That the primary and essential lesion probably exists in the peripheral sympathetic system, and perhaps, too, in the supreme centre in the medulla oblongata, the last supposition being based on the occasional occurrence of bulbar symptoms in mvxœdema. W. R. BIRDSALL, M.D.

## d.—MENTAL PATHOLOGY.

Delirium from Gall-Stones.—Cases of this kind are not exceptional, but are so infrequent as to be of interest. Dr. W. J. Moore (*Dublin Fournal of Medical Science*, August, 1882) reports a case in which a woman was attacked by delirium during the passage of gall-stones through the common bile duct. During the de-

lirium, which lasted six hours, she sang very correctly some of the masses of Mozart. The patient had been a resident of India and the gall-stones were of unusually large size.

ORIGINAL MONOMANIA. - Dr. C. T. Fenn (American Medical Weekly, August 19, 1882) cites a case of this form of insanity. There was in the case an hereditary neurotic tendency. The patient was a quiet, soft child, addicted to day-dreams. He showed talent, but of a puerile character. He had several feminine ideals, but no symptoms of insanity were noticed until the age of thirty-The patient fell extremely in love with a lady of superior station, who had never given any encouragement; who rebuffed him on all occasions. He believed that the friends of the object of his affections were at the bottom of this; that they slandered and persecuted him, and his conduct changed: from being temperate he became addicted to ardent spirits, and had frequent attacks of delirium tremens. He soon adopted a wandering life, and dressed in the incongruous dress so frequent with the chronic insane. Hallucinations of sight and hearing soon became manifest. He lived till the age of eighty-two without ever having been confined in an asylum for the insane. The patient died from senile exhaustion. There were found meningo-encephalitic changes. The brain was asymmetrical. The skull was markedly asymmetrical, and the occipital fossa shallow. There was asymmetry of the convolutions. There were three on the right island of Reil and four on the left. A case of almost equal duration was cited in this Journal, October, 1881.

HEREDITARY INSANITY.—Under this title Dr. A. W. Hagenbuch (Chicago Medical Fournal and Examiner, August, 1882) considers various forms of insanity in which hereditary taint exists. Of the one hundred and fifty admissions to the Jefferson Illinois Asylum during the past two years thirty-six presented very strong evidence of heredity. This is a very large percentage when it is recollected that Jefferson is a pauper asylum, and the histories of a large number of patients are not obtained. He has found asymmetry of the cranium to be of such frequency among the hereditary types of insanity, that in his opinion it "should not be overlooked in forming an opinion as to the probability of insanity developing, as well as to suggest early treatment to prevent an outbreak of insanity." He finds, like other authorities, that the

acute episodial attacks occurring among the hereditary insane usually have a good prognosis. In dealing with the question of home-treatment he takes into account what is often ignored by both the pro-asylum and anti-asylum fanatics, namely, that the blood-relatives of insane people are often badly adapted to carry out a physician's directions.

PSYCHOSES FROM URÆMIA.—Dr. Brieger (Charité Annalen, vii, 240) reports the following case: A patient suffering from chronic nephritis had several attacks of epilepsy (?). After the first attack the patient was comatose, and eighteen hours' hallucinations presented themselves, and were attended by much emotional excitement. Soon after there was a condition of total amnesia, and this was succeeded by a short period of psychical integrity. There was an indefinite relation between the albuminuric condition of the patient and the emotional excitement. In a case reported by Dr. E. J. Messemer (Gaillard's Medical Fournal, vol. xxx, p. 503), the psychical symptoms presented resembled those of progressive paresis. The patient recovered from his nephritis, and on recovery the psychic symptoms disappeared.

CRIMINAL INSANITY.—After passing in review the views of Morel, and analyzing the physical and mental degeneracies to which Morel has called attention, and also the inter-relation which has been claimed to exist between crime and subsequent insanity in the next generation, Dr. Kneud Pontoppidan (Nordiskt mediciniskt Arkiv, Band xiv, No. 16) comes to the following conclusions: First, That the facts do not compel the establishment of a particular variety of criminal alienation, which is characterized by a mixture of moral depravity and mental alienation. His argument is, however, based on special pleading, and certainly does not show a broad view of the subject. He cites cases in which insanity resulted in crime, but no moral depravation occurred. In other words, he sets up the existence of a criminal insane class to disprove the existence of insane criminals. In the one case, the crime was an incidental result of the insanity; in the other, the crime and insanity were necessary concomitants.

Non-Medical Insanity Experts.—Under this caption Gaillard's Medical Fournal, October, makes the following apt editorial comment: The absurdity of non-medical evidence as to in-

sanity, especially where of a negative character, has been very well shown by two recent cases. A cashier of a Poughkeepsie bank was suddenly noticed to be very extravagant; this led to investigation, and a defalcation was found. On examining the cashier's house, notes, drafts, and money were found scattered over it, hidden in out-of-the way places; in some cases evidently for several years. The man was ultimately found to be suffering from a wellmarked type of insanity, progressive paresis, and sent to an insane asylum. In this case, sharp, keen business men had had a man under observation for several years, yet he committed criminal acts due to the onset of an easily diagnosticated form of insanity. In the second case, a teller of a Troy bank was insane for several years before the trustees knew it. Meanwhile the cashier had been able, by reason of the the teller's infirmity, to rob the bank and bring it to the verge of suspension. Here are two cases where business men might be expected to detect the first sign of insanity, since their interests were deeply concerned, but in both cases their pecuniary interests suffered because they failed to detect the preliminary symptoms of an exceedingly easily diagnosticated form of insanity. If keen business men fail to find evidences of insanity in cases where their interests are deeply concerned, how little value can be attached to their negative evidence in cases of no special interest to them but where life and death or personal property are concerned. The story about Esquirol and the young physician has a special application here. Medical journals, therefore, which are citing the evidence of laymen as to the non-existence of insanity, are doing the profession as much dishonor as if they cited lay testimony as evidence of the value of some copyrighted nostrum.

DEFINITION OF INSANITY.—Dr. E. C. Spitzka (*Chicago Medical Review*, July 15, 1882) proposes the following definition of insanity:

<sup>&</sup>quot;Insanity is either the inability of the individual to correctly register impressions and experiences in sufficient number to serve as rational guides to rational behavior in consonance with the individual's age, time, and circumstances, or, such impressions and experiences being correctly accumulated in sufficient number, a failure to co-ordinate them and thereon to frame logical conclusions, or any other gross mental incongruity with the individual's surroundings in the shape of subjective manifestations of cerebral disease or defect, excluding the phenomena of sleep, trance, som-

nambulism, the ordinary manifestations of the neuroses, such as epilepsy and hysteria, of febrile delirium, coma, acute intoxications, and the ordinary immediate results of nervous shock and injury." Similar though not as comprehensive definitions were independently proposed by Dr. C. H. Hughes (St. Louis Medical and Surgical Fournal, 1878), by Dr. Jas. G. Kiernan (Gaillard's Medical Fournal, Nov., 1880), by Dr. Mercier (Fournal of Mental Science, Jan., 1882), and Dr. Hughlings Jackson (cited by Mercier).

DIFFERENTIATION IN INSANE ASYLUMS.—Dr. R. S. Dewey (Fournal of Insanity, July, 1882) calls attention to the fact that the problem of providing asylums for the insane is a complicated He calls attention to the fact that one embarrassing factor in this problem is the existence of three great classes which engender special difficulties, dangers, and inconveniences. are the insanities complicated by epilepsy, by crime, and by alcoholic excess. The conclusion of Dr. Dewey is that in 3,000 insane there are about 192 epileptics. The proportion at the New York City asylum was somewhat below this, 101 out of 2,293. These epileptics he believes should be taken care of in a special asylum. He is inclined to believe that the proportion of insane convicts is 48 to 1,500 convicts, though Dr. Dewey admits that this proportion is probably much too low. His remarks apropos of the relation of the insane criminals to the criminal well deserve quotation. He says: "The question requiring most careful consideration is with reference to unconvicted insane persons who have committed crimes. Many of these belong strictly to the criminal class and on the same plane as convicts; while at the other extreme are those whose crime is a direct consequence of insanity. Between these are all possible links. Those held to be abandoned criminals have been found to be insane. Crime committed with malice prepense has been found to be the act of lunatics. There are criminals with inherited depraved and defective brains, who cannot be held responsible. There are the epileptic criminals. There are lunatics who know perfectly well the nature of their crime, who are able to distinguish the moral quality of their crime, and who are actuated by a criminal motive. There are lunatics who plan and execute their crime deliberately and allege some fantastic motive as its justification. Insane patients are met with who feign insanity in some other form in the hope of escaping from the consequences of their crime. Finally, there are lunatics who know that they are immune from punishment and only lack opportunity to perpetrate deeds of malice or revenge." This is sound psychiatry, but it directly contradicts the teachings of the Utica School, especially as laid down by Dr. Gray in the Guiteau trial. Dr. Dewey would have the exact status of crime-committing lunatics determined: some sent to the criminal lunatic asylums like those at Auburn, New York; Chester, Illinois; and Fulton, Missouri; and Broadmoor, England; and a few only to the general asylums. The habitués, for it is these that Dr. Dewey means by this third class and not alcoholic paretics, etc., should be sent to special institutions. The remaining insane relieved from the incubus of the three classes cited could be well treated by the mixed cottage and asylum system so well illustrated at Kankakee.

MANIA TRANSITORIA.—It is only a few years since Dr. Ordronaux ( Fournal of Insanity, vol. xxix, p. 333), that legal light of the Utica School, fiercely denounced the theory of mania transitoria in terms that drew upon him the ridicule of Achille Foville (Annales Médico-Psychologiques, 1874). It is, therefore, somewhat astonishing to find a case of this identical psychosis described by Dr. E. N. Brush, of the Utica Asylum (Fournal of Insanity, July, 1882). A man, aged twenty-three, was exposed to a temperature of 20° F. Psychical symptoms soon resulted which temporarily yielded to ether. After three days' asylum-treatment the man was discharged recovered. There was much motor excitability, but the case is imperfectly described. Dr. Brush calls it "Delirium from Cerebral Hyperæmia," but cites Schwartzer, the leading authority on transitory fury, and Reich as corroborating his position, and uses the term transitory mania as synonymous with the appellation he has given his case. Strictly speaking the mania transitoria is an acute stormy psychosis, not really a mania. Cases of it have already been cited in this JOURNAL (Oct., 1880) which support Schwartzer's position, and it is agreeable to find these supported by a case from the Utica School, which has so long cavilled at mania transitoria.

SEXUAL PERVERSION.—Dr. G. Alder Blumer (Fournal of Insanity, July, 1882) reports a case of sexual perversion in a man, twenty-seven years old, whose hereditary history was not well described. The father was vacillating and "eccentric," whatever

that means in this case. The mother was emotional. The mother bore him "long after the child-bearing period," and he was a twin. He conceived a violent platonic affection for a friend. To enable him to retain this friend's affection he wrote anonymous letters denouncing the latter, and pretended to cling to Marriage and pæderasty were the friend despite the letters. alike distasteful. He was fond of discussing feminine dress. There were some evidences of epilepsy. The case is similar in some respects to those reported by Dr. H- (Medical Record, Mar. 19, 1882), Servæs (Archiv für Psychiatrie, 1876), Kraft-Ebing (Archiv für Psychiatrie, 1877), Krueg (Allgemeine Zeitschrift für Psychiatrie, Band xxxviii), Le Grand du Saulle (Annales Médico-Psychologiques, May, 1876); and was unlike the acquired sexual perversion described by Dr. W. A. Hammond (American Fournal of Neurology and Psychiatry, Aug., 1882), a fact to which Dr. Hammond calls attention.

Female Sexual Disease and Insanity.—Dr. Danillo (Archives de neurologie, Sept., 1882) says that the complication of insanity by female sexual diseases is very frequent during the continuance of sexual physiological functions. After the menopause such complication is rare. Pregnancy and the lying-in period also influence such complications. He believes that insanity is influenced by, and influences the female sexual disorders; that these aggravate and are aggravated by the insanity; the two conditions acting in a vicious circle. These claims are much more logical than those put forth by the gynæcologists.

Self-recognized Insanity.—Under the title of "folie avec conscience," of which the above is a somewhat free translation, Dr. Marandon de Montezel (Archives de neurologie, Sept., 1882) discusses a condition, which he says is characterized by the fact that the patient reflects on his sensorial and psychic troubles, and having analyzed them, recognizes their morbid nature. Is there really such a state? The reasoning of Dr. Montezel seems to show only the fact that the patient temporarily recognizes the fact that some of mental phenomena are the result of morbid conditions. Not to split hairs too finely, the cases cited show only that when the patient was under the full influence of these morbid ideas he did not recognize their nature, or vice versa. Dr. Montezel also fails to distinguish hypochondriac conditions,

which led the patient to claim danger of softening of the brain. His first case was that of a woman, who believed she was suffering from cerebral softening, which is a popular synonym for progressive paresis, as it is a synonym for a hundred distinct conditions. The second case narrated is that of a paretic, who had a remission, and recollected imperfectly his expansive ideas as dreams. The third case is similar. That such a condition may occur, as Montezel has pointed out, in the hereditary vesanias, there can be no doubt. In these a normal idea may sway the abnormal to such an extent, that its force is lessened and finally destroyed. As has been shown elsewhere (JOURNAL OF NERVOUS AND MENTAL DIS-EASE, January, 1881), that by a collateral process of reasoning, systematized lunatics may correct their delusions. These rare cases have, however, been confounded by Montezel, with remissions in progressive paresis, and hypochondriasic conditions. This error is pardonable, compared with the false statements recently made, that lunatics never recognized their insanity, and did not therefore act accordingly. The "folie avec conscience" of Montezel does not, except in a limited sense, exist; but even that limited existence is inconsistent with the false dicta of the Guiteau trial.

THE INSANE VICTIMS OF THE FRANCO-PRUSSIAN WAR.-Schwaab (Archiv für Pyschiatrie, xii) reports a case in which he claims that the fatigues of the Franco-Prussian war had occasioned such a disturbance of the nervous system as to develop a psychosis. The patient had, however, been suddenly attacked by a varioloform eruption in 1871. This was accompanied by cephalalgia and sensations of heat in the head. This eruption disappeared leaving cicatrices behind it to reappear as abruptly as at first in 1872-73, the patient continuing to suffer from occipito-bregmatic pain in the interval. The patient exhibited melancholic fury and was dipsomaniacally inclined, and also exhibited wandering tendencies, being finally found in 1879 near Auerbach, in a field, amnesic and half dead from cold and hunger. Seeming progressive paresis, with decided physical and psychical symptoms, then made its appearance, which disappeared to give place to apparently complete mental and physical restoration. The eruption suddenly reappeared in 1880, followed, as before, by melancholic fury and troubles of speech and gait. Schwaab concludes that the psychosis was due to the mental strain of the war. Frölich refers it to the eruption. This last, however, seems to have originated in the nervous condition, rather than vice versa.

HYGIENE OF THE INSANE.—Dr. L. A. Pomponne (Thèse de Paris, 1882) does not lean to the opinion at one time expressed by Griesinger, that asylums for the insane should be in cities. Isolation, which is the basis of asylum treatment of the insane can be best carried out in the country, where the hygienic surroundings are also the best. Pomponne believes that the detached-ward system and not the wing system generally adopted, is, for like reasons, the best. The grounds should be beyond the walls of the asylum, planted with trees, and containing twelve hundred square metres to each patient. The sleeping apartments should be on the first floor, and lighted from the top. The hospital should also be situated on the first floor. There should also be a separate annex for convalescents. Dr. Pomponne prefers for the uncleanly the simple mattrass of straw, so generally used in American asylums. He looks upon absolute non-restraint as a utopian idea. He regards the crib-bed as a dangerous implement. The camisole should not, except in case of extreme necessity, be used to confine a patient to bed. He believes it better to camisole a patient than to seclude him. This, however, is too absolutely stated; seclusion is of decided benefit in certain cases, and just the opposite in others.

THE GUITEAU AUTOPSY.—Concerning this, Dr. C. F. Folsom (Boston Medical & Surgical Fournal, Sept. 21, 1882) says: "Dr. Spitzka, of New York, has expressed the opinion that the asymmetry of Guiteau's brain, as shown by post-mortem examination, is sufficient to justify the diagnosis of congenital insanity, the primäre Verrücktheit of German authorities." In this opinion Dr. Folsom is unable to concur, but claims that the asymmetry, taken in connection with the great thinness of the cortex of parts of the anterior portion of the brain, which was unaccompanied by any excess of fluid in the ventricles or elsewhere, had some value as corroborative evidence of hereditary insanity, and marks a brain which was from infancy or some early age incapable of normal development.

"In the pathological conditions shown in the blood-vessels, the perivascular lymph-spaces, the neuroglia, and the cells, with little, if any, evidence of atrophy, and with the anatomical elements for the most part preserved, can be seen only indications of recent disease, if the report of the autopsy can be interpreted correctly. The *Medical News*, which maintained Guiteau's sanity during life, and affirms his responsibility now, acknowledges that the mi-

croscopic examination revealed changes in Guiteau's brain which 'constitute the initial stage of a malady which, in its fullest development, is known as dementia paralytica or an allied disease, the early symptoms of which disorder correspond closely with the mental condition of Guiteau during the past year.'

"Could there be any more humiliating record to add to the story of the trial? As it stands, however, it leaves to those who testified that Guiteau was 'perfectly sane,' and to the many more who thought that he was 'only a crank,' a difficulty of explaining their position from which we can see no possible satisfactory extrication. We would suggest, as a diagnosis in this case, hereditary insanity, manifested in early life or congenital, and attended with such symptoms as are grouped under the unsatisfactory term moral insanity, to which were added the periods of excitement somewhat resembling mild mania common in that disease, and finally ending in the initial stage of general paralysis of the insane, in which distinct motor symptoms or general dementia would not In the clause last quoted Dr. Folsom lends support to the view with "which he is unable to concur." The lesions found are those often present early in progressive paresis, but they are also found as a consequence of episodial excitement in "primäre Verrücktheit," The diagnosis of Dr. Folsom, just given, was, with the exception of the progressive-paresis element, that made early in the case by two, at least, of the experts.

MORAL INSANITY.—Dr. C. H. Hughes read a paper before the Asylum Association on "Moral (Affective) Insanity," (Alienist and Neurologist, October, 1882,) in which he took the scientific stand-point that such a form of insanity did exist, and cited the following case: A girl soon after an attack of mercurial poisoning underwent a marked change of character. She was intellectually bright, but delighted in various immoral acts, especially in vituperating and telling scandalous stories about her nearest and, hitherto, her dearest relatives. Dr. Hughes regarded her as a case of moral, or, as he preferred to call it, affective insanity. Dr. MacFarland regarded the case as one of moral insanity, as also did Dr. Nichols, who expressed his full adherence to this scientific doctrine, and therefore did not agree with the dictum laid down at Washington, that "the term moral insanity is unknown to science." Drs. Goldsmith and Stevens regarded the case as one of psychic epilepsy. Dr. R. M. Bucke was of

opinion that the case was one of congenital moral imbecility, which would sooner or later develop into intellectual insanity. Dr. J. B. Andrews said it was a case which would probably terminate in intellectual insanity. Dr. Hughes said that the existence of moral insanity in the present case was much more conceivable than the existence of so-called psychic or larvated epilepsy, the assumption of which was only using a hypothetical method to get rid of a case conflicting with preconceived ideas. The case only presented symptoms of the moral nature; into what it might ultimately develop could be only a matter of hypothesis.

TREATMENT OF PERIODIC INSANITY.—Before the last meeting of the Asylum Association, Dr. H. M. Hurd read a paper upon "Treatment of Periodic Insanity." The idea which he wished to enforce was the beneficial influence of a return home of the patient in the intervals of maniacal excitement, when the intervals of quiet and apparent recovery are sufficiently long. The influence of hope, of engagement in business, and of the return to the home circle were urged as good reasons for a temporary discharge from the hospital. Incidentally the history of several cases was given, and the influence of judicious medication in retarding the exacerbation or attack of mania was illustrated. In the subsequent discussion a large number of the members took part. Most of those present agreed with Dr. Hurd, having found in many cases good results following from an experimental return of the patient to his home, especially where the home environment is such as to exert a tranquillizing effect upon the patients. Dr. Fisher said that the prospect of a return home is one of the most potent of moral agents in the treatment of the insane. He had practised great liberality also in the matter of allowing visits from friends on the outside. It was generally agreed, however, that when the patient is married, the danger of his or her becoming a parent during this interval of calmness seriously complicated the question. In the case of the unmarried, or the married who are beyond the bearing period, it was generally pronounced a safe experiment to allow the patient to either visit home frequently or to return to it on trial.

MENTAL CONDITION OF GUITEAU.—Two contributions have lately been added to the literature of this subject: one of them by Dr. Charles H. Hughes (Alienist and Neurologist, October, 1882), the other by Dr. T. W. Fisher (Boston Medical and Surgi-

cal Fournal). The two believed the case one of congenital insanity, the first marked symptoms of which were observed at puberty, when there was the evidence of a mental change, in the letters written to his sister, in his abandonment of his ambitions and studies, and his embracing the theory of the Oneida Community. His conduct while a member of the community, his moroseness, inefficiency in the field work, and a number of details, showed a morbid mind. At three times in his life was he pronounced insane by those cognizant of his life: at Ann Arbor, when he wrote in a strain of affected piety to his sister; in the defence made by Noyes, of the Oneida Community, to the assassin's suit to recover the balance of the \$1,000 which he had placed in its treasury; and the third time, in 1875, when he threatened his sister with an axe. Dr. Fisher, with regard to the question whether the assassin was a fraud, a fanatic, or a lunatic, thought it would be fortunate if such cases could be placed strictly within any class made by the legal profession. In regard to his fanaticism, it was pointed out that a belief in the Divine leadership was one of the leading ideas of his life. That he was not altogether a fraud was indicated by the growth of his own esteem of himself in proportion as he became more degraded. It seemed perfectly natural to the assassin that a man of brains and decision, a man with a new religious truth to promulgate, should have had this great idea of the assassination of Garfield as the means of preserving the Republican party and thereby the country, suggested to him by Divine authority. The homicide was the outgrowth of false reasoning, and not a result of passion or revenge.

The nicety of his arrangements and his cool behavior after his arrest are evidences of this. He acted like a man who had performed a great act, beyond the comprehension of the vulgar mob. It was the crowning act of his career, to him. It seemed the crowning act of an insane life. It requires vastly more straining of probability to suppose the assassin sane than the reverse. If, when he was haunting the White House, or soliciting the Paris Consulship, he had been arrested as the insane vagrant he was and appeared to be, he could have been committed to the asylum. He would have been held on the strength of his history and absurd claims. Since the assassination, scores of persons have been sent to the asylum on slighter evidence of insanity than this, owing to an awakened public dread of "cranks." It would not be possible for another individual to repeat the assassin's con-

duct previous to the assassination, without instant arrest and committal to the asylum. Why, then, should a homicide so much resembling insanity discredit his insanity? It can hardly be conceived possible that a sane man, however desperate and depraved, could have simulated insanity before, and in the commission of such an act to cover his real motives. More within the bounds of probability is it that an insane man having committed an act which he supposed could be justified to the world, having failed in this expectation, should fall back upon the legal plea of insanity. He might even feign some other form of insanity.

VACCINATION AMONG THE INSANE. -- Dr. M. J. MADIGAN (Chicago Medical Review, July 1, 1882) says, concerning this, that there are numerous delusions which render vaccination among the insane difficult, since patients believe they can be poisoned by this means. One patient evolved the curious delusion that his enemies had chosen this means of introducing spermatozoa into his system, and thus impregnating him. In the portion of the asylum under his charge, were congregated progressive paretics, cases of melancholia attonita, acuta, and agitata, of chronic intellectual insanity with depressing delusions, terminal dementia, and of hebephrenia (insanity of puberty). The phenomena resulting from vaccination might be divided into four great classes. those in which the vaccinia exerted a beneficial effect upon the pre-existing insanity; second, those in which it unfavorably influenced this; third, those in which dangerous complications resulted; and, finally, those in which dermic phenomena were present: these latter were exceptional. Vaccination exerted the most marked favorable influence in melancholia attonita and agitata, progressive paresis, in a few cases of acute melancholia, and in some cases of chronic intellectual insanity, and chronic mania with incoherence. In all of the cases wherein such influence was exerted, the vaccination was followed by a high fever and marked general constitutional disturbance. There was a pretty general eruption resembling variola. On the fever subsiding (in at least ten cases it reached 102° F.), the patient, if a melancholiac, was much more cheerful, and, occasionally, delusions of persecution seemed to be temporarily in abeyance. One case permanently recovered, and as it had exhibited no change previous to the vaccination, it is by no means impossible that this exerted a marked influence. The cases of progressive paresis were attacked by boils soon after recovering from the vaccination, and were for a short time rational, but the physical symptoms of the disease remained unchanged. The cases of melancholia agitata were quiet and cheerful during the constitutional disturbance from the vaccination; after it had passed away, all but two returned to their usual condition. These two improved from this time, and finally recovered. Three cases of chronic intellectual mania were markedly quiet and talked rationally during the vaccinal fever. Four cases of chronic mania with incoherence talked coherently and relevantly during the vaccinal fever, but resumed their usual condition on recovery. In a large number of cases the vaccination exerted a decidedly unfavorable result. Delusions of infection with syphilis, of loss of identity, of paralysis, of poisoning, and, in several cases, of infection with small-pox, were found to be much more frequent after the vaccination. One new delusion has already been mentioned. In the progressive paretics certain trophic changes made their appearance. The toe nails in four cases dropped off. In one case hæmatoma auris made its appearance during the vaccinal fever. In a case of syphilitic progressive paresis the luctic affection seemed to take on a malignant type. Three cases of melancholia attonita, who had markedly deficient capillary circulation, suffered from gangrene of the toes and fingers in consequence of vaccination. There were formed in a few cases of progressive paresis large bullæ, which subsequently gave way to ulcers of a very indolent type. In two cases of progressive paresis, apoplectiform attacks came on during the vaccinal fever. In ten cases of progressive paresis large abscesses made their appearance after the vaccinal fever had subsided, on the seat of the pre-existing vaccinal eruption. In one case the hair of a progressive paretic became gray on one side of the head, while the eruption from vaccinia remained confined to the opposite side of the body. Two cases of melancholia attonita, which were suffering from phthisis, seemed to be disastrously influenced as regards the pulmonary affection, which had been previously running its course without marked febrile disturbance, but thereafter had marked rises in temperature. One case of melancholia acuta displayed symptoms of diabetes during the vaccinia, which, however, vanished on recovery. The dermic phenomena displayed by the patients during the existence of vaccinia were very varied. In some cases the eruption (which in at least fortytwo was generalized) displayed a tendency to appear in patches of two or three pustules. In others there was a tendency of the eruption to follow the course of a nerve. In certain cases the former places of vaccination exhibited pustules which began soon after, and ran about the same course as the pustules of vaccination.

## BIBLIOGRAPHY.

Original monomania, Pasternazki, Wratsch, No. 31. Epileptic insanity, Botkin, Medizinkoje Obosrenje, July, 1882. Psychical phenomena from optic atropine applications, Filatow, Medizinkoje Obosrenje, July, 1882. Hysteria, or insanity, Dr. C. H. Miller, Southern Practitioner, Nov., 1882. Lectures on insanity, Dr. Jas. G. Kiernan, Detroit Lancet, Nov., 1882. Treatment of insanity, Dr. C. H. Davis, Gaillard's Medical Fournal, Oct., 1882. Insane epileptic incendiaries, Dr. Möli, Berliner klinische Wochenschrift, July 10, 1882. Influence of onvel on the insane, Medical Times and Gazette, April 18, 1882. Repeated sentences of a lunatic, Dr. R. Kohn, Vierteljahrschrift fürgerichtliche Medicin, xxvii, p. 73. Two cases of epileptic insanity, Fürstner, Berliner klinische Wochenschrift, July 10, 1882. Sexual perversion in a male with welldeveloped mammæ, Dr. Raggi, Annali Universali di Medici e Chirurgia. Apomorphia in agitated lunatics, Dr. Marshe, Revue médicale Suisse Romande, May, 1882. Lesions of the genital sphere and insanity in the female, Dr. Mairet, Montpelier médical, Jan. and April, 1882. Cancer as related to insanity, Dr. Ch. Bessière, Thèse de Paris, 1881. Contribution to the study of ambitious delirium, Dr. Bachelot, Thèse de Paris, 1881. Case of "acute" (?) primäre Verrücktheit, Dr. Andrusski, Wratschebnija Wedomosti, No. 27, 1882. Hallucinations, Dr. Pasternazki, Wratsch, No. 37, 1882. Ergotin in delirium tremens, Dr. Arnoldow, Wratsch, No. 37, 1882. Case of moral insanity, Dr. Andrusski, Wratschebnija Wedomosti, No. 36. Hysteria and progressive paresis, E. Régis, Gazette Médicale, No. 2-6, 1882.

J. G. Kiernan, M.D.

## e.—THERAPEUTICS OF THE NERVOUS SYSTEM.

CONSTANT CURRENTS; THEIR PHYSIOLOGICAL AND PATHOLOGICAL ACTION.—A. Estorc has found, in confirmation of previous experiments of M. Vigoroux, that in cases of hysterical hemianæsthesia the anæsthetic side offers much more resistance than the healthy to the constant current. When the anæsthesia